In the Claims:

1. (Currently Amended) An ~~under-voltage~~ undervoltage detection (UVD) circuit for monitoring a supply voltage, the circuit comprising:

a comparator for generating a shortfall signal indicative of a shortfall of the supply voltage in relation to a reference voltage, the shortfall signal being a current signal having a value which varies proportionally with the shortfall of the supply voltage in relation to the reference voltage, and

an integrator for time-integrating the shortfall signal to form an integrated signal,

wherein the ~~output of the integrator~~ undervoltage detection circuit is arranged to[[used]] use the integrated signal to generate a reset signal for resetting a microprocessor.

2. (Original) A UVD circuit according to claim 1 further including a discriminator circuit for receiving the integrated signal and at least one further output of the comparator, and generating a reset signal using the integrated signal and the at least one further output.

3. (Original) A UVD circuit according to claim 2 in which the discriminator circuit is arranged to receive a control signal, the discriminator circuit further comprising a switch controlled by the control signal for determining whether the reset signal is generated based on the integrated signal or the at least one further output signal.

4. (Currently Amended) An apparatus comprising:

microprocessor circuitry;

an ~~under-voltage~~ undervoltage detection (UVD) circuit that includes a comparator for generating a shortfall signal indicative of a shortfall of a supply voltage in relation to a reference

voltage, the shortfall signal being a current signal having a value which varies proportionally with the shortfall of the supply voltage in relation to the reference voltage and an integrator for time-integrating the shortfall signal to form an integrated signal, wherein the ~~output of the integrator~~ undervoltage detection circuit is [[used]]arranged to use the integrated signal to generate a reset signal for resetting the microprocessor circuitry, and

reset means arranged to receive the reset signal output by the UVD circuit and according to its value to initiate a reset of the microprocessor circuitry.

5. (Currently Amended) A method of monitoring a supply voltage including:

generating a shortfall signal indicative of a shortfall of the supply voltage in relation to a reference voltage the shortfall signal being a current signal having a value which varies proportionally with the shortfall of the supply voltage in relation to the reference voltage;

time-integrating the shortfall signal to form an integrated signal; and

generating a reset signal using the ~~shortfall~~ integrated signal, wherein the reset signal is for resetting a microprocessor.

6. (Previously Presented) The method of claim 5 and further comprising resetting the microprocessor with the reset signal.

7. (Previously Presented) The apparatus according to claim 4 wherein the UVD circuit further includes a discriminator circuit for receiving the integrated signal and at least one further output of the comparator, and generating a reset signal using the integrated signal and the at least one further output.

8. (Previously Presented) The apparatus according to claim 7 in which the discriminator circuit is arranged to receive a control signal, the discriminator circuit further comprising a switch controlled by the control signal for determining whether the reset signal is generated based on the integrated signal or the at least one further output signal.

9. (Currently Amended) An ~~under-voltage~~ undervoltage detection (UVD) circuit for monitoring a supply voltage, the circuit comprising:

a comparator for generating a shortfall signal indicative of a shortfall of the supply voltage in relation to a reference voltage, and

an integrator for time-integrating the shortfall signal to form an integrated signal,

wherein the output of the integrator is used to generate a reset signal for resetting a microprocessor, the UVD circuit further including a discriminator circuit for receiving the integrated signal and at least one further output of the comparator, and generating a reset signal using the integrated signal and the at least one further output, and wherein the discriminator circuit is arranged to receive a control signal, the discriminator circuit further comprising a switch controlled by the control signal for determining whether the reset signal is generated based on the integrated signal or the at least one further output signal.

10. (Currently Amended) An apparatus comprising:

an ~~under-voltage~~ undervoltage detection (UVD) circuit that includes a comparator for generating a shortfall signal indicative of a shortfall of a supply voltage in relation to a reference voltage, and an integrator for time-integrating the shortfall signal to form an integrated signal, wherein the output of the integrator is used to generate a reset signal for resetting the apparatus; and

reset means arranged to receive the reset signal output by the UVD circuit and according to its value to initiate a reset of the apparatus,

wherein the UVD circuit further includes a discriminator circuit for receiving the integrated signal and at least one further output of the comparator, and generating a reset signal using the integrated signal and the at least one further output,

in which the discriminator circuit is arranged to receive a control signal, the discriminator circuit further comprising a switch controlled by the control signal for determining whether the reset signal is generated based on the integrated signal or the at least one further output signal.